

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL-TYPE SEARCH REPORT

(PCT Article 15.5)

National application No. <b>0400199-6</b>	Country or Office of filing <b>SE</b>	Applicant's or agent's file reference <b>M183</b>
Filing date (day/month/year) <b>30 January 2004</b>		(Earliest) Priority Date (day/month/year)
Applicant <b>Medivir AB</b>		

Date of request for international-type search <b>30 January 2004</b>	International-type search request No. <b>SE 04/00061</b>
---	---

This international-type search report has been prepared by this International Searching Authority and is transmitted to the applicant.

This international-type search report consists of a total of 2 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the language, the international-type search was carried out on the basis of the application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international-type search was carried out on the basis of a translation of the application furnished to this Authority.

b. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the application, see Box No. I.

2. ☐ Certain claims were found unsearchable (See Box No. II).

3. ☐ Unity of invention is lacking (See Box No. III).

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/SE2005/000096

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claims 54,56 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## INTERNATIONAL-TYPE SEARCH REPORT

Search request No.

SE 04/00061

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: C07D 401/12, C07D 215/22, A61K 31/4709, A61K 31/47, A61P 31/12  
 According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: C07D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

CHEM. ABS. DATA

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6265380 B1 (TUNG ET AL), 24 July 2001 (24.07.2001)	1-89
	--	
A	EP 1408031 A1 (3 D GENE PHARMA), 14 April 2004 (14.04.2004)	1-89
	--	
	-----	

☐ Further documents are listed in the continuation of Box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance  
 "E" earlier application or patent but published on or after the international filing date  
 "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  
 "O" document referring to an oral disclosure, use, exhibition or other means  
 "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international-type search

11 August 2004

Date of mailing of the international-type search report

2004 -08- 18

Name and mailing address of the ISA/

Swedish Patent Office  
 Box 5055, S-102 42 STOCKHOLM  
 Facsimile No. + 46 8 666 02 86

Authorized officer

CAROLINA GÓMEZ LAGERLÖF/BS  
 Telephone No. + 46 8 782 25 00

## INTERNATIONAL-TYPE SEARCH REPORT

Information on patent family members

03/07/2004

Search request No.

SE 04/00061

US	6265380	B1	24/07/2001	US	6617309	B	09/09/2003
				US	2002032175	A	14/03/2002
				AP	1019	A	16/10/2001
				AP	9901512	D	00/00/0000
				AT	212037	T	15/02/2002
				AU	719984	B	18/05/2000
				AU	5147798	A	15/05/1998
				BG	103392	A	31/01/2000
				BR	9712544	A	19/10/1999
				CA	2268391	A	30/04/1998
				CZ	9901340	A	11/08/1999
				DE	69709671	D,T	22/08/2002
				DK	932617	T	22/04/2002
				EA	1915	B	00/00/0000
				EE	4023	B	15/04/2003
				EE	9900161	A	15/12/1999
				EP	0932617	A,B	04/08/1999
				SE	0932617	T3	
				HK	1023779	A	00/00/0000
				HU	0000152	A	28/07/2000
				IL	129407	D	00/00/0000
				JP	2001502694	T	27/02/2001
				NO	991832	A	17/06/1999
				PL	332872	A	25/10/1999
				SI	932617	T	00/00/0000
				SK	51099	A	10/04/2000
				CN	1133649	B	07/01/2004
				CN	1238780	A	15/12/1999
				EP	1136498	A	26/09/2001
				ES	2169880	T	16/07/2002
				ID	21649	A	00/00/0000
				IN	183120	A	11/09/1999
				KR	2000049263	A	25/07/2000
				NZ	335276	A	29/09/2000
				PT	932617	T	28/06/2002
				TR	9901602	T	00/00/0000
				TW	530065	B	00/00/0000
				WO	9817679	A	30/04/1998
				ZA	9709327	A	11/05/1998

---

EP	1408031	A1	14/04/2004	WO	2004033425	A	22/04/2004
----	---------	----	------------	----	------------	---	------------

---

# INTERNATIONAL SEARCH REPORT

Int: Application No  
PCT/SE2005/000096

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07K5/02 C07D401/12 C07D409/14 C07D405/14 C07D413/14  
C07D417/14 C07D207/16 A61K31/47 A61P31/12 C07D487/04

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K C07D A61K A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, CHEM ABS Data, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 00/09543 A (BOEHRINGER INGELHEIM LTD; LLINAS-BRUNET, MONTSE; BAILEY, MURRAY, D; C) 24 February 2000 (2000-02-24) cited in the application claims	1-56
A	US 2003/186895 A1 (LLINAS-BRUNET MONTSE ET AL) 2 October 2003 (2003-10-02) claims	1-56
X	EP 0 443 132 A (FUJISAWA PHARMACEUTICAL CO., LTD) 28 August 1991 (1991-08-28) page 7, formula XI	1-5
X	EP 0 126 587 A (SUMITOMO CHEMICAL COMPANY, LIMITED; SUMITOMO PHARMACEUTICALS COMPANY,) 28 November 1984 (1984-11-28) page 53, reference example 1-25	1-5
-/--		

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*A\* document member of the same patent family

Date of the actual completion of the international search

8 August 2005

Date of mailing of the international search report

12/08/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

De Jong, B

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/JP2005/000096

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	ZANOTTI, GIANCARLO ET AL: "Synthesis of analogs of amaninamide, an amatoxin from the white Amanita virosa mushroom" INTERNATIONAL JOURNAL OF PEPTIDE & PROTEIN RESEARCH , 30(4), 450-9 CODEN: IJPPC3; ISSN: 0367-8377, 1987, XP008050698 compound with RN=112772-43-7; 112772-44-8; 112772-45-9 page 454, right-hand column, line 19 - line 32	1-5
X	ZANOTTI, GIANCARLO ET AL: "Analogues of amanin. Synthesis of Ile3-amaninamide and its diastereoisomeric (S)-sulfoxide" INTERNATIONAL JOURNAL OF PEPTIDE & PROTEIN RESEARCH , 18(2), 162-8 CODEN: IJPPC3; ISSN: 0367-8377, 1981, XP008050700 page 166, right-hand column, line 26	1-5
E	WO 2005/010029 A (ENANTA PHARMACEUTICALS, INC; WU, FRANK, X., H; NAKAJIMA, SUANNE; OR, Y) 3 February 2005 (2005-02-03) the whole document	1-56

## INTERNATIONAL SEARCH REPORT

 In Application No  
 PCT/SE2005/000096

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0009543	A	24-02-2000	AU 769738 B2	05-02-2004
			AU 5273199 A	06-03-2000
			BG 105232 A	30-11-2001
			BR 9913646 A	05-06-2001
			CA 2338946 A1	24-02-2000
			CA 2445938 A1	24-02-2000
			WO 0009543 A2	24-02-2000
			CN 1323316 A	21-11-2001
			CZ 20010516 A3	15-08-2001
			EA 3906 B1	30-10-2003
			EE 200100081 A	15-08-2002
			EP 1105413 A2	13-06-2001
			HR 20010102 A1	28-02-2002
			HU 0105144 A2	29-04-2002
			ID 27839 A	26-04-2001
			JP 2002522554 T	23-07-2002
			NO 20010683 A	02-04-2001
			NZ 510396 A	27-02-2004
			PL 346626 A1	25-02-2002
			SK 2062001 A3	08-10-2001
			TR 200100432 T2	21-09-2001
			TR 200200129 T2	21-06-2002
			US 6534523 B1	18-03-2003
			US 6323180 B1	27-11-2001
			US 6268207 B1	31-07-2001
			US 6329379 B1	11-12-2001
			US 6329417 B1	11-12-2001
			US 2002016442 A1	07-02-2002
			US 2002037998 A1	28-03-2002
US 2003186895	A1	02-10-2003	CA 2369970 A1	01-08-2003
			BR 0307517 A	28-12-2004
			WO 03064416 A1	07-08-2003
			CA 2474031 A1	07-08-2003
			EP 1474423 A1	10-11-2004
			US 2003191067 A1	09-10-2003
EP 0443132	A	28-08-1991	AT 98651 T	15-01-1994
			AU 640185 B2	19-08-1993
			AU 6801090 A	27-06-1991
			CA 2032864 A1	23-06-1991
			CN 1064080 A ,C	02-09-1992
			CN 1159949 A	24-09-1997
			DE 69005286 D1	27-01-1994
			DE 69005286 T2	21-04-1994
			DK 443132 T3	24-01-1994
			EP 0443132 A1	28-08-1991
			ES 2060910 T3	01-12-1994
			FI 906204 A ,B,	23-06-1991
			HK 18696 A	09-02-1996
			HU 56581 A2	30-09-1991
			HU 9500376 A3	28-08-1995
			IE 904581 A1	03-07-1991
			JP 2560919 B2	04-12-1996
			JP 4210996 A	03-08-1992
			KR 180223 B1	01-04-1999
			NO 905572 A ,B,	24-06-1991
			PT 96324 A ,B	30-09-1991

# INTERNATIONAL SEARCH REPORT

Int. application No  
PCT/SE2005/000096

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0443132	A	RU 2055078 C1 US 5468731 A ZA 9009901 A	27-02-1996 21-11-1995 30-10-1991
EP 0126587	A	28-11-1984	JP 60166683 A 29-08-1985 JP 1684436 C 31-07-1992 JP 3052466 B 12-08-1991 JP 59205379 A 20-11-1984 JP 60001186 A 07-01-1985 JP 1771979 C 14-07-1993 JP 4063076 B 08-10-1992 JP 60019787 A 31-01-1985 JP 1841117 C 25-04-1994 JP 5051594 B 03-08-1993 JP 60058987 A 05-04-1985 JP 1521360 C 12-10-1989 JP 60104088 A 08-06-1985 JP 63055514 B 02-11-1988 AT 121402 T 15-05-1995 CA 1283906 C 07-05-1991 DE 3486382 D1 24-05-1995 DE 3486382 T2 17-08-1995 EP 0126587 A1 28-11-1984 HK 183095 A 08-12-1995 MX 9203063 A1 01-07-1992 NL 950019 I1 01-11-1995 US 4933333 A 12-06-1990 US 4943569 A 24-07-1990 US 5122604 A 16-06-1992 ES 8600305 A1 01-01-1986 BG 60499 B2 31-05-1995 JP 1079181 A 24-03-1989 JP 1841805 C 12-05-1994 JP 4066872 B 26-10-1992
WO 2005010029	A	03-02-2005	US 2005065073 A1 24-03-2005 WO 2005010029 A1 03-02-2005